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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,950	02/20/2002	Olivier Matile	0503-1009	3030
466	7590	06/24/2004	EXAMINER	
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			KASTLER, SCOTT R	
			ART UNIT	PAPER NUMBER

1742

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)
	10/077,950		MATILE, OLIVIER ed
	Examiner	Art Unit	
	Scott Kastler	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/8/2004 (RCE) and 5/28/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-10,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed on 6-8-2004 in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5-28-2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beyer et al in view of WO'302. Beyer et al teaches laser cutting steel sheets with a thickness of up to 1mm (see col. 4 lines 16-18 for example) with a cutting speed of up to 250 m/min (see col. 4 lines 16-18 for example) using a gas mixture containing hydrogen in an amount of up to 25% by volume (see claim 4 for example) and nitrogen as the inert gas (see col. 3 lines 27-28) showing all aspects of the above claims except the use of a "multifocus type" lens as the optical means for focusing the laser (Beyer et al teaches only a general lens device (2), but does not exclude the use of bifocal or multifocus lenses as the lens to be employed) or the specific workpiece thicknesses, cutting speeds and hydrogen content values, which all fall within the broad ranges disclosed as workable by Beyer et al. WO'302 teaches that when laser cutting

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metals, in order to reduce slag adherence and improve cutting quality, it was known in the art at the time the invention was made to employ bifocal or multifocal lenses as the optical means for focusing the laser at different points (see both the abstract and claims for example). Because improved cutting quality is also desired in Beyer et al, motivation to include a multifocal type lens as taught by WO'302 to improve cutting quality, as the optical focusing means (2) required by Beyer et al, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. With respect to the use of the specifically recited workpiece thicknesses, cutting speeds and hydrogen content values, which all fall within the broad ranges disclosed as workable by Beyer et al, it has been well settled that where, as in the instant case, no new or unexpected result is expressly shown to arise from the use of a claimed range within a broader range recited by the applied prior art, it would have been a modification *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to select any value or range from a range broadly disclosed by the prior art. See MPEP 2144.05 I. In the instant case, since all values within the broad ranges recited by Beyer et al are disclosed as workable, motivation to select any of the values for the workpiece thicknesses, cutting speeds and hydrogen content values, which all fall within the broad ranges disclosed as workable by Beyer et al, would have also been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Response to Arguments

Applicant's arguments, see pages 5-7, filed on 5-28-2004, with respect to the rejection(s) of claim(s) 1-14 under 35 USC 103 as obvious over Faerber in view of WO'302 have

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been fully considered and are persuasive at least in light of the accompanying amendment to the claims which limit the workpiece to be cut to various types of steels, which as stated in the applicant's arguments do not fit the requirement of Faerber of having a cohesive oxide layer. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Beyer et al in view of WO'302 as recited above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Scott Kastler
Primary Examiner
Art Unit 1742

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